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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,606	11/29/2001	Hiroyuki Oda	216634US2S	2312

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EXAMINER
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GUHARAY, KARABI

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 07/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/995,606	<b>Applicant(s)</b> ODA ET AL.	
	<b>Examiner</b> Karabi Guharay	<b>Art Unit</b> 2879	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____                                    |

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

Fig. 1, & Fig. 9A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiwara et al. (JP 4-160739).

Regarding claims 1 & 11, Fujiwara et al. disclose a cathode ray tube (Fig 2) comprising an electron gun (Fig 1) having electron beam generating section (cathodes K) which generates a plurality of electron beams and a main lens (grids G5 through G6) which focuses the electron beams on a phosphor screen (12) and a deflection yoke (18) which produces a deflection magnetic field that deflects the electron beams emitted from electron gun (15) in a horizontal and vertical direction, the main lens section

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comprises a focus electrode supplied with focus voltage of a first level, at least one intermediate electrode (Gm1, Gm2) with a voltage of a second level equal to or higher than first level, and anode (G6) supplied with an anode voltage of third level higher than the second level, the focus electrode (G5), at least one intermediate electrode (Gm1, Gm2) and the anode (G6) being arranged in a direction of travel of the electron beam (see Fig 1b), and the main lens section includes an electric lens acting commonly on the electron beams on a focus region of the main lens section formed by focus electrode (G5) and intermediate electrode (Gm1) and a plurality of electric field lens acting respectively on the electron beams on a divergence region of the main lens section which is formed by the intermediate electrode (Gm2) and the anode (G6). See Fig 4a.

Regarding claim 2, Fujiwara et al. disclose that the focus electrode (G5) and the intermediate electrode (GM1) have at their mutually opposing faces, outer peripheral electrodes defining opening portions, which commonly pass the electron beams (see Fig 4a, and see English abstract).

Regarding claim 3, Fujiwara et al. disclose at least one intermediate electrode (Gm2) and the anode (G6) have at their mutually opposing faces, a plurality of electron beam passage holes which individually pass the electron beams (Fig 4a).

Regarding claims 4, 5 & 6, Fujiwara et al. disclose each of the plurality of holes formed in anode (G6) is of non-circular shape with a major axis in the horizontal direction (Fig 11) are axially asymmetric lens having horizontal focusing lens function and a vertical diverging lens function (see Constitution part of Abstract).

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Regarding claim 7, Fujiwara et al. disclose that the main lens section comprises a focus electrode (G5) and first intermediate electrode (Gm1) and a second intermediate electrode (Gm2) and an anode (G6) which are arranged in a direction of travel of the electron beam and the electric field lens acting commonly on the electron beam is formed by the focus electrode (G5) and the first intermediate electrode (Gm1) and a plurality of electric field lens acting respectively on the electron beams are formed by the second intermediate electrode (Gm2) and the anode (G6). See Fig 4a.

Regarding claim 8, Fujiwara et al. disclose that the at least one intermediate electrode (Gm1, Gm2) is connected to a resistor disposed near the electron gun and supplied with a voltage obtained by resistor-dividing anode voltage (Fig 4a).

Regarding claims 9 & 13, Fujiwara et al. disclose that focus electrode has a first focus electrode (G4) supplied with a reference voltage and a second focus electrode (G5) supplied with a dynamic focus voltage obtained by superimposing upon the reference voltage an ac component varying with deflection yoke (see Fig 4a. and page 213 of the document).

Regarding claim 10, Fujiwara et al. disclose that the second focus electrode (G5) and the intermediate electrode (GM1) have at their mutually opposing faces, outer peripheral electrodes defining opening portions, which commonly pass the electron beams (see Fig 4a, and see English abstract).

Claim 12 recites essentially the limitations of claim 2 and 3. Thus claim 12 is rejected as claims 2&3 (see rejection of claims 2 & 3).

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Regarding claim 14, Fujiwara et al. disclose that the focus electrode (G5) includes an end face (first cylinder of the G5 electrode) having a plurality of electron beam passage holes which individually passes each electron beam and an outer peripheral electrode (the cylindrical cup of the G5 electrode nearest to the intermediate electrode Gm1) forming an electron beam passage hole (Fig 4b) which commonly passes the electron beams (see constitution of English Abstract).

***Other Prior Art Cited***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure : Amano et al. (US 6100630); Kimiya et al. (US 6313575).

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is (703) 305-1971. The examiner can normally be reached on Monday-Friday 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

K.G

Karabi Guharay  
Patent Examiner  
Art Unit 2879



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